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CLAIMS

1.—10. (Cancelled)

11. (Currently Amended) A mold apparatus for molding a component onto a stretched blank comprising:

a first mold part;

a second mold part;

a stretching assembly disposed between said first mold part and said second mold part, said stretching assembly including a plurality of clamp assemblies operable to grip the periphery of the blank and hold the blank, said stretching assembly further including a plurality of slide assemblies for selectively moving said clamp assemblies to apply a stretch to the blank, said clamp assemblies and said slide assemblies positioned about the periphery of the blank to enable stretching the blank to a stretched condition in which the blank is stretched in both a first direction and in a second direction perpendicular to said first direction; and

an apparatus for closing said first mold part and said second mold part on the blank while the blank is held in a stretched condition by said stretching assembly, wherein said stretching assembly includes a plate defining a central opening permitting said first mold part and said second mold part to close on the stretched fabric, said slide assemblies being movably mounted to said plate and said clamp assemblies operatively mounted to said slide assemblies, wherein said plate is movably mounted to said first mold part and is movable along a path between a stretch position and a mold position, wherein the direction of said path is generally

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perpendicular to said first direction and said second direction of said stretching of said blank, the apparatus further including biasing means for biasing said plate in said stretch position, wherein said biasing means is further defined as a plurality of springs disposed between said plate and said first mold part, wherein at least one of said slide assemblies includes a slide movably mounted to said plate and a stretch cylinder interconnected between said slide and said plate, whereby extension and retraction of said stretch cylinder results in movement of said slide with respect to said plate, wherein at least one of said clamp assemblies includes a clamp head pivotally mounted to one of said slides and a clamp cylinder interconnected between said clamp head and said slide, wherein extension and retraction of said clamp cylinder results in pivotal movement of said clamp head with respect to said slide. ~~The apparatus of claim 10,~~ wherein said stretching assembly includes a plurality of fabric pins; and

further including a robot for transferring the blank from a loading station to the stretching assembly, said robot including a placing tool including a plurality of shot pins arranged to align with said fabric pins when said placing tool is positioned adjacent to said stretching assembly.

12. (Original) The apparatus of claim 11, wherein at least one of said shot pins includes a transfer pin and a sleeve, at least one of said transfer pin and said sleeve being movable with respect to said other of said transfer pin and said sleeve, wherein actuation of said shot pin pushes the blank off of said transfer pin and onto a corresponding one of said fabric pins.

13. (Original) The apparatus of claim 11, further including an air knife assembly mounted to said

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robot arm adjacent to said placing tool.

14. (Original) The apparatus of claim 13, farther including a stretch measuring assembly mounted to said robot arm adjacent to said placing tool.

15. (Original) The apparatus of claim 14, wherein said stretch measuring assembly includes a frame, a plurality of blocks movable mounted to said frame, a plurality of fabric needles mounted to said blocks and a sensor for generating signals indicative of movement of said blocks with respect to said frame.

16.—18. (Cancelled)

19. (Currently Amended) The assembly of claim ~~18~~ 11, ~~further including a~~ wherein said springs ~~means for~~ biasing said plate away from ~~the at least one~~ said first mold part.

20.—21. (Cancelled)

22. (Currently Amended) The apparatus of claim ~~20~~ 11, wherein a strain gauge is disposed between said stretch cylinder and at least one of said plate and said slide to generate signals indicative of a force being applied to the blank.

23. (Currently Amended) The apparatus of claim ~~19~~ 11, wherein said plate defines a plurality of guide holes, said guide holes adapted to be fitted over alignment rods in ~~the at least one~~ said first mold part to movably support said plate adjacent to ~~the at least one~~ said first mold part.

24. (Cancelled)

25. (Currently Amended) The ~~tooling~~ apparatus of claim ~~24~~ 12, wherein each of said transfer pins is selectively retractable within said sleeve.

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26. (Currently Amended) The ~~tooling~~ apparatus of claim 25, wherein said shot pins are pneumatically actuated, wherein a partial vacuum is applied to said shot pins to retract said transfer pins.

27. (Cancelled)

28. (Currently Amended) The ~~tooling~~ apparatus of claim ~~27~~ 13, wherein said air knife assembly includes a first nozzle array for expelling pressurized air in a first direction and a second nozzle array for expelling pressurized air in a second direction.

29.—44. (Cancelled)

45. (Currently Amended) The ~~assembly~~ apparatus of claim ~~44~~ 15, wherein said ~~means for measuring includes~~ sensor is a linear transducer.

46. (Currently Amended) The ~~assembly~~ apparatus of claim ~~44~~ 45, further including a needle guard movable between a closed position covering at least one of said fabric needles and an open position exposing said fabric needle.

47.—48. (Cancelled)

49. (Currently Amended) The ~~assembly~~ apparatus of claim ~~44~~ 46, further including a base and a cylinder, said cylinder interconnecting said base and said frame, whereby extension and retraction of said cylinder results in movement of said frame with respect to said base.

50.—51. (Cancelled)

52. (Currently Amended) The ~~assembly~~ apparatus of claim ~~51~~ 49, further including at least one alignment rod extending between said frame and said base to address rotation of said frame with

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respect to said base.